

NewTek TriCaster

Tim Stackpool takes a look in his backpack and finds a tiny Outside Broadcast facility in with his lunch box, GPS and this month's issue of *Gourmet Traveller*.

Text:/Tim Stackpool

TRICASTER, DEVELOPED by 'studio-in-a-box' innovators NewTek, is described as 'bringing the production and distribution capabilities of broadcast television to the enterprise environment'. And well it might; combining most items found in a TV OB van into a single box. One version is easy enough to fit into a small backpack. And while many event producers might salivate over the concept of a single-box solution, NewTek is also obviously targeting non-production personnel with this device, using plenty of non-industry jargon on the control interface, hopefully attracting corporate communications, human resources, educators, marketers, and corporate training professionals to jump right in and immediately start producing and distributing broadcast quality live events and presentations.

The base model offers simplified live switching and audio mixing, with real-time simultaneous output to video, projector and the internet for \$9279 RRP (less for institutions). This model supports three live Standard Definition (SD) analogue inputs – Y/C (component) or composite, includes a virtual internal Digital Disk Recorder (DDR) for hard disk playback of video and template-driven titles. A video editor is also included. Output options include live analogue video output, DV output for edited projects, VGA output for projectors and a live internet streaming file.

TURNING PRO

At the intermediate level sits the TriCaster Pro. This SD version ups the ante on the basic model, with BNC video connections, balanced audio in/out and more flexibility, with simultaneous streaming and video capture. In common with its baby brother, this model can

ingest full-screen graphics, spreadsheets, video and live web pages from another PC across a local network. These images can then be mixed with any other inputs. The TriCaster output also up-scales any video to the projector's native resolution, which could represent a saving for users who currently rely on hardware video scalars. One other neat trick is the auto DDR roll function. Internal video clips can be cued to roll as soon as the source is taken 'to-air'.

For Tim Joy, technical director at Event Directions in South Australia, the TriCaster has proved to be an invaluable tool of trade, for everything from medical conferences to sports coverage. "The great advantage of the TriCaster is its size. Most of my work is interstate, so having something this powerful but so portable is great," Tim said. "Sometimes when working in a hospital operating theatre we have very limited space, so having the TriCaster that can mix three cameras, and two audio inputs, keeps the space we occupy in the operating theatre to a minimum." When it comes to conferences, the TriCaster has also become a time saver. "The way I used to capture files from a conference, audio and PowerPoint slides would take a very long time to render in post production. With TriCaster the files are captured in a ready-to-edit format."

To appease those who insist that value is measured in terms of transition effects, TriCaster comes pre-installed with hundreds of choices between wipes, peels, 3D page curls and much more. These are managed by adding them to the effects folder found on the GUI. All transitions serve dual duty, once in the switcher and again in the real-time editor. Doubling as an editor, any shots can be arranged in a storyboard or placed on a traditional timeline. Picture-in-picture

effects, titling and creating multiple video layers are also possible using the proprietary editor. Because the TriCaster is built on the Windows platform, any third party Windows based editing or file manipulation application can be installed on the device after delivery, albeit running non-collaboratively with the TriCaster software itself.

STUDIO SESSIONS

Of more interest to the audiovisual or semi-broadcast professional will be the TriCaster Studio. The motherlode of the AV-type series allows up to six SD camera inputs, real-time chromakeying, multiple upstream effects and virtual sets. With dual DDR playback, both of which are keyable and 16:9 wide-screen supported titling, this version also supports NewTek's iVGA graphics import, live Windows Media and VC1 Streaming, simultaneous AVI and WMV recording to the hard disk, replay of AVI, MPEG-2, QuickTime and other file formats as well as being able to render the output to DVD, iPod and PSP type files.

For Event Directions, the TriCaster Studio assists with their sports coverage. "We use it to capture and generate highlights for cricket matches at the Adelaide Oval. We capture each ball on separate files, then make a playlist of the highlights to playout via the TriCaster Studio." Tim Joy said.

Yet another TriCaster version, the Broadcast, matches the specification of the Studio, but includes SDI input and output options, as well as some enhanced preview opportunities.

COMING SOON... WIDESCREEN HD

Recently, at the NAB show in Las Vegas, TriCaster announced their High Definition (HD) version, the XD300.

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This model is based on NewTek's most recently developed hardware, core to all their HD range of products. This version boasts 3 SD/HD inputs, HD DDRs, iVGA and other virtual inputs for chroma key sets and more complex DVE effects. The software behind this unit has been developed from the ground-up in full 64 bit code, offering superior performance over earlier models. Another noteworthy specification is that the XD300 performs operations in the full 32 bit colour space with no colour sub-sampling at any point, being 4:4:4 all the way.

NewTek's expertise in the realm of cost-effective virtual sets is well established, and the incorporation of that know-how into TriCaster solves many budget virtual world applications. For example, their live multi-camera scaling technology can display any chroma keyed subject in a virtual extreme wide-shot without trucking the camera to the back of the room to do so. "Shoot for air, not for rendering" is the catch-cry, giving any on-screen performer the opportunity to interact with virtual monitors, desks and other pseudo-environmental elements while monitoring the effect in real-time. Because the Broadcast model and the new XD300 allow for 6 camera inputs, the virtual sets are designed to allow performing 3D transitions and mixing between all camera angles while maintaining correct background proportions.

While the TriCaster software also generates a control room 'video wall' via a dedicated 'operations' VGA output, from which all function can be previewed and implemented, some operators may prefer to actually switch via a more traditional panel rather than with a mouse or assigned buttons on the

computer's keyboard. As such NewTek offers their TriCaster LiveControl. This panel with large, back-lit, easy-to-read buttons can have all camera, picture, video, and network sources assigned to it, on either the Up Next or Live row. Some rotary dials also allow the operator to quickly choose title or picture pre-sets or change transition speeds. A traditional T-bar is subsequently included in the form factor to smoothly blend between sources.

TRI AS YOU MIGHT

TriCaster might feel right at home in an established production facility, but its real value lies in the portability of the unit and the power contained therein. As first glance, it certainly appears impressive, but upon a second look, the versatility the unit provides, combined with the ease of set up, makes it an obvious choice for producers that might subsequently (or simultaneously) wish to broadcast their event through a variety of media.

Of the models currently available in Australia, the basic model retails for \$9279. The Pro sells for \$14,959, with the Studio available off the shelf for \$19,995. Moving into the SDI realm, the Broadcast series weighs in at \$23,429. Pricing for the the XD300 will be available later in the year.

TriCaster is available from TechMedia, who offer full upgrade protection on TriCaster, meaning that by simply paying the difference, any TriCaster purchased now can be swapped for the XD300 when it is released in late 2009. 📌

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From top to bottom:
TriCaster's main screen, showing previews, output, mix/effects and audio mixer.
TriCaster's special trick is virtual sets. The LiveSet tool comes with a library of pre-built sets that can be added to with expansion packs for additional sets and addition pre-built camera shots.
TriCaster Broadcast. Slightly smaller than an OB van.
TriCaster's optional LiveControl panel for operators who prefer real control surfaces to virtual ones.